

Appl. No. 09/909,192  
Amdt. Dated July 22, 2004  
Reply to Office action of April 22, 2004  
Attorney Docket No. P14653/27943-00417  
EUS/J/P/04-6162

### **Listing of Claims:**

1. (Currently Amended) A telecommunications system within a Code Division Multiple Access 2000 (CDMA2000) network, said CDMA2000 network having a base station serving a sector, said base station further having a queue therein for storing data packets associated with data sessions involving one or more mobile terminals whose respective data rate controls (DRC) are pointed towards said sector, said queue having a size, said telecommunications system comprising:

an overhead message handler adapted to receive said queue size and compare said queue size with a predefined threshold wherein said queue size is the amount of data packets stored within said queue to be transmitted to said one or more mobile terminals associated with said sector;

means for selecting one or more of said mobile terminals when said queue size exceeds said predefined threshold; and

means for transmitting a respective message to said selected one or more mobile terminals, said message instructing said selected one or more mobile terminals to not point their said respective DRCs towards said sector.

2. (Original) The telecommunications system of claim 1, further comprising:

a base station controller connected with said base station, said overhead message handler being within said base station controller.

3. (Original) The telecommunications system of claim 1, wherein said message is a QuickConfig message.

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4. (Original) The telecommunications system of claim 3, wherein each said QuickConfig message includes a DRC Lock field, said DRC Lock field having a bit set to 0 indicating that said DRC of said respective selected mobile terminal is not valid.

5. (Original) The telecommunications system of claim 4, wherein each said QuickConfig message includes a Reserved field, said Reserved field having one or more bits set to a MACIndex associated with said respective selected mobile terminal.

6. (Original) The telecommunications system of claim 1, wherein said means for selecting comprises mobile terminal selection logic adapted to analyze one or more factors to select said selected one or more mobile terminals to discontinue using said sector for said respective data sessions.

7. (Original) The telecommunications system of claim 1, wherein said selected one or more mobile terminals set their DRC cover index to 0 in response to receipt of said message.

8. (Original) The telecommunications system of claim 1, wherein said selected one or more mobile terminals perform virtual handoffs to one or more adjacent sectors of said base station by pointing their respective DRCs towards the adjacent sectors.

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9. (Original) The telecommunications system of claim 1, wherein said base station is a high data rate (HDR) base station having a data only carrier capable of providing only data service to said one or more mobile terminals.

10. (Currently Amended) A telecommunications system for load sharing within a Code Division Multiple Access 2000 (CDMA2000) network, said telecommunications system comprising:

a base station serving a sector, said base station further having a queue therein for storing data packets associated with data sessions involving one or more mobile terminals whose respective data rate controls (DRCs) are pointed towards said sector, said queue having a size; and

a base station controller storing a predefined threshold for said sector therein, said base station controller being adapted to receive said queue size from said base station and compare said queue size with a predefined threshold wherein said queue size is the amount of data packets stored within said base station to be transmitted to said one or more mobile terminals, said base station controller being further adapted to select one or more of said mobile terminals when said queue size exceeds said predefined threshold and transmit a respective message to said selected one or more mobile terminals instructing said selected one or more mobile terminals to not point their respective DRCs towards said sector.

11. (Original) The telecommunications system of claim 10, wherein said message is a QuickConfig message.

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12. (Original) The telecommunications system of claim 11, wherein each said QuickConfig message includes a DRC Lock field, said DRC Lock field having a bit set to 0 indicating that said DRC of said respective selected mobile terminal is not valid.

13. (Original) The telecommunications system of claim 12, wherein each said QuickConfig message includes a Reserved field, said Reserved field having one or more bits set to a MACIndex associated with said respective selected mobile terminal.

14. (Original) The telecommunications system of claim 10, wherein said selected one or more mobile terminals set their DRC cover index to 0 in response to receipt of said message.

15. (Original) The telecommunications system of claim 10, wherein said selected one or more mobile terminals perform virtual handoffs to one or more adjacent sectors of said base station by pointing their respective DRCs towards the adjacent sectors.

16. (Original) The telecommunications system of claim 10, wherein said base station is a high data rate (HDR) base station having a data only carrier capable of providing only data service to said one or more mobile terminals.

17. (Currently Amended) A Base Station Controller within a Code Division Multiple Access 2000 (CDMA2000) network, said Base Station Controller comprising:

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a predefined threshold for a sector associated with said Base Station Controller, said sector having one or more mobile terminals therein each pointing their respective Data Rate Control (DRC) towards said sector for a respective data session, said sector having a queue associated therewith, said queue storing data packets associated with said data sessions, said queue having a size wherein said queue size is the amount of data packets stored within said queue to be transmitted to said one or more mobile terminals associated with said sector;

an overhead message handler adapted to receive said queue size and compare said queue size with said predefined threshold; and

selection logic adapted to select one or more of said mobile terminals when said queue size exceeds said predefined threshold and cause said Base Station Controller to transmit a respective message to said selected one or more mobile terminals, said message instructing said selected one or more mobile terminals to not point their respective DRCs towards said sector.

18. (Original) The Base Station Controller of claim 17, wherein said message is a QuickConfig message.

19. (Original) The Base Station Controller of claim 18, wherein each said QuickConfig message includes a DRC Lock field, said DRC Lock field having a bit set to 0 indicating that said DRC of said respective selected mobile terminal is not valid.

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20. (Original) The Base Station Controller of claim 19, wherein each said QuickConfig message includes a Reserved field, said Reserved field having one or more bits set to a MACIndex associated with said respective selected mobile terminal.

21. (Currently Amended) A method for load sharing within a Code Division Multiple Access 2000 (CDMA2000) network, said method comprising:

storing a predefined threshold for a sector of said CDMA2000 network, said sector having a queue associated therewith for storing data packets associated with data sessions involving one or more mobile terminals whose respective data rate controls (DRCs) are pointed towards said sector, said queue having a size wherein said queue size is the amount of data packets stored within said queue to be transmitted to said one or more mobile terminals;

comparing said queue size with said predefined threshold; and

if said queue size exceeds said predefined threshold, transmitting a respective message to selected ones of said one or more of said mobile terminals instructing said selected one or more mobile terminals to not point their respective DRCs towards said sector.

22. (Original) The method of claim 21, wherein each said message is a QuickConfig message, said step of transmitting further comprising:

setting a bit of a DRC Lock field of said QuickConfig message to 0 indicating that said DRC of said respective selected mobile terminal is not valid.

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23. (Original) The method of claim 22, wherein said step of transmitting further comprises;

setting one or more bits of a Reserved field of each said QuickConfig message to a MACIndex associated with said respective selected mobile terminal.

24. (Original) The method of claim 21, further comprising:

setting the DRC cover index of each of said selected one or more mobile terminals to 0 in response to receipt of said message.

25. (Original) The method of claim 21, further comprising:

performing virtual handoffs by said selected one or more mobile terminals to one or more adjacent sectors by pointing their respective DRCs towards said one or more adjacent sectors.

26. (Original) The method of claim 21, wherein said step of transmitting further comprises:

analyzing one or more factors to select said selected one or more mobile terminals to discontinue using said sector for said respective data sessions.